

William M. Davies, Jr. Career and Technical High School  
Incoming Freshman - Math Placement Assessment  
School Year 2019-2020

Print Name \_\_\_\_\_

**Show all work for each problem.  
Write your final answer on the Student Answer Sheet.**

**Part 1**

**1. Simplify using Order of Operations:**

$$\frac{(4 - 1 + 8 \div 8)5}{(10 \cdot 2) \div (1 + 1)}$$

**2. Evaluate and simplify the expression if:  $a = -10$ ,  $b = 2$ ,  $c = -8$  and  $d = 6$ .**

$$\frac{bd - c}{a}$$

**3. Simplify the expression using the Distributive Property.**

$$-9(m - 7) - 2m$$

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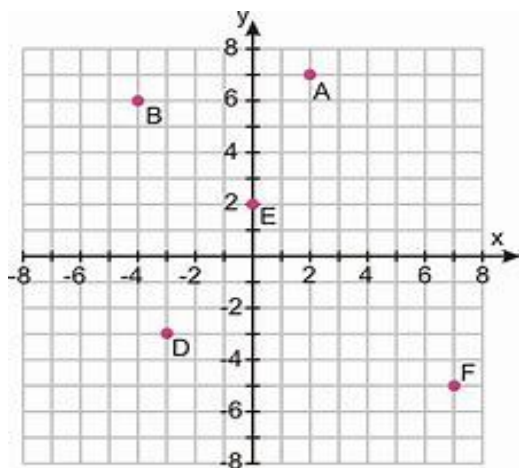
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4. Solve the equation for x:

$$x + 2 = -2$$

5. Using the graph below, identify the coordinates of each point.



6. Identify all the solutions to the following inequality:  $x \leq 2$ .

0	-2	-1	3	2
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**Part 2**

7. Solve the equation for x.

$$-8x + 4 = 36$$

8. Solve the equation for x.

$$3(2x - 4) = 18$$

9. Simplify the polynomial:

$$2(-3x^2 + 6x) - 4x^2 - 9x + 24$$

10. Solve the equation for x.

$$3(2x - 1) - 11 = -2(1 - x)$$

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**Part 3**

11. a. Find the slope of each function.

$$g(x) = \frac{5}{3}x + 2$$

$$-3x + 5y = 9$$

b. Identify the y-intercept of each function.

12. Solve the equation for x.

$$\frac{3}{5}x - 6 = 2x + 2$$

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13. Write the equation of the line in slope intercept form which contains the following points:

$$(4, 2) \text{ and } (3, -1)$$

14. Solve the following inequality:

$$\frac{-2x + 6}{4} \leq 10$$

15. Solve the system of equations. Write your answer as an ordered pair.

$$x + 3y = 6$$

$$4x - 5y = 7$$

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**STUDENT ANSWER SHEET**

**PART 1**

**SCORE \_\_\_\_ / 6**

**1.**

**Answer:** \_\_\_\_\_

**2.**

**Answer:** \_\_\_\_\_

**3.**

**Answer:** \_\_\_\_\_

**4.**

**Answer:** \_\_\_\_\_

**5.**

**A:** \_\_\_\_\_ **B:** \_\_\_\_\_ **D:** \_\_\_\_\_ **E:** \_\_\_\_\_ **F:** \_\_\_\_\_

**6.**

**Solutions include:** \_\_\_\_\_

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**STUDENT ANSWER SHEET**

**PART 2**

**SCORE \_\_\_\_ / 4**

**7.**

**Answer:** \_\_\_\_\_

**8.**

**Answer:** \_\_\_\_\_

**9.**

**Answer:** \_\_\_\_\_

**10.**

**Answer:** \_\_\_\_\_

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**STUDENT ANSWER SHEET**

**PART 3**

**SCORE : \_\_\_\_\_ / 5**

**11.**

**Slope: \_\_\_\_\_**

**Slope: \_\_\_\_\_**

**Y-intercept: \_\_\_\_\_**

**Y-intercept: \_\_\_\_\_**

**12.**

**Answer: \_\_\_\_\_**

**13.**

**Equation of line: \_\_\_\_\_**

**14.**

**Answer: \_\_\_\_\_**

**15.**

**Ordered Pair: \_\_\_\_\_**